



THE AMERICAN BEE JOURNAL

THOMAS G. NEWMAN,
EDITOR.

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Locating the Paraffine Combs!—The stupid advocates of the "Wiley lie" about the manufacture of comb from paraffine, filling it with glucose and sealing it over with a "hot iron," are still industriously engaged in trying to find the place where it is said to be manufactured—but each time are foiled in the attempt! Bro. Root, in the last issue of *Gleanings*, gives the result of another "hunt," in the following language:

A short item appeared in the Pittsburgh *West-End Bulletin*, to the effect that there was an establishment in Pittsburgh making comb honey, etc. Our good friend W. H. Ferguson, of Bloomsdale, O., while in the above city, took the pains to follow it up. The editor of the paper declared there was no mistake about it, and gave the street and number. When our friend got there they said it was a fact, but that it was off somewhere else, up three flights of stairs, and so on. What do you think they found? Why, a man who makes cement and sealing-wax; and it happened that this worthy tradesman also put up very neat little cakes of wax for the sewing-table—just that, and nothing more.

The persistence of these scoundrels would be praise-worthy in any laudable undertaking, but when trying to defend that lie of Wiley's, by finding an apology for its utterance, is very disgusting. Poor fools! they will always have "their labor for their pains!"

The Bee-Lawsuit against Mr. C. C. Richardson, mentioned on page 691 of the *BEE JOURNAL* for last year, has terminated. The suit was dismissed by the judge. The attorney's fees amount to \$20, of which the Union pays one-half and Mr. Richardson the other half.

This is another triumph for the Union, which backed up the defendant in such a way as to show that the pursuit cannot be attacked with impunity.

As there is another firm in Chicago by the name of "Newman & Son," we wish our correspondents would write "American Bee Journal" on the envelope when writing to this office. Several letters of ours have already gone to the other firm (a commission house), causing vexatious delay and trouble.

Rat-Tat-Tat!—Rattle the drums! for we have received the following positive Order from a self-appointed Supreme Dictator:

ROSSVILLE, Jan. 29, 1887.
EDITOR OF AMERICAN BEE JOURNAL:—Stop "bee-legislation" in the *BEE JOURNAL*. It is no matter for discussion. It is undebatable—unsensible—unnecessary—un-American—tending to anarchy. Now stop it, and let "the survival of the fittest" settle the subject forever!
M. F. TATMAN.

Isn't that sublime? Who appointed him a dictator to the three hundred thousands of bee-keepers of America? By what authority or law does he decide for hundreds of thousands that the subject shall not be debated? Who appointed him a dictator to issue the Order—"Now stop it?"

The only excuse that can be offered for such sublime assurance is the thought that our would-be dictator is a crank! No one in a sane condition would assume the prerogative he so boldly claims! His friends should seek some quiet retreat where he may regain his mental equilibrium!

We have had nothing to say as yet on the merits of the question of "bee-legislation," but when we have anything to communicate we shall not think of asking permission of the would-be Dictator for our doings. And if our correspondents desire to "discuss" the subject, that fulmination cannot shut them out of the AMERICAN BEE JOURNAL.

The Union Convention at Albany, N. Y., a condensed report of which will be found in this issue of the AMERICAN BEE JOURNAL, was a decided success, and a very harmonious body. The *Bee-Keepers' Magazine* speaks thus of it:

The convention at Albany was quite a success. There were present bee-keepers from Virginia, Pennsylvania, New Jersey, Vermont, Massachusetts, Ohio, Michigan, and several other States. The one notable feature was the entire absence of any friction between the members—everything moved in such perfect harmony. Under the exceptionally able guiding of President W. E. Clark, not a clash occurred, and every proceeding was carried on with order and decorum. Mr. Clark, to our mind, makes a most capital presiding officer, being impartial, dignified and decided.

There were present on the platform at the time the presidents of four different bee-keepers' associations, viz: New York State, Eastern New York, New Jersey and Eastern and the Philadelphia Association. We do not remember of such a thing having occurred in the annals of bee-keepers' conventions in America. Perhaps our statistical friend, Editor Newman, will correct us, however, on this point.

We have no desire to criticize nor "correct" the *Magazine*, but being called on we will say that there were four or more "presidents" on the platform at the Detroit and Indianapolis meetings. At the Cincinnati convention of 1880, there were three editors of bee-papers, five presidents of bee-societies, and three ex-presidents of the society on the platform. We rejoice to notice such harmony, and hope it may long continue.

Concerning another visitor the *Magazine* remarks as follows:

We had with us at the meeting on the second and third days, Mr. Jas. A. Abbott, of Southall, England, who, up to a late day, was in partnership with his brother in one of the largest bee-keepers' supply business in England, but who is now about to start another house himself. This gentleman is a man of close observation, and when he talks "bee-business" he knows what he is talking about.

The Union has Lost None!—Of all the suits against bee-keeping in the United States, which the National Bee-Keepers' Union have deemed expedient to defend, not one has been lost!

The "Freeborn" case in Wisconsin was presented in such a manner, backed up by the Union, that the judge kicked it out of court!

In the "Bohn" case in California, the united resistance of the bee-keepers of the Nation was too much for the fruit-growers—and that trouble, which was proclaimed by a Nebraska apiarist to be "too much for the Union to compete with," is now all conquered! the raisin growers [admitting that they were mistaken!]

The "Darling" case in Connecticut was dismissed as soon as it was discovered that he was "backed up" by the National Bee-Keepers' Union!

Now, the "Richardson" case in Indiana has been dismissed by the court! This is the "case" which was so badly misrepresented at the Indianapolis convention, by an officious neighbor, and it is with much satisfaction that we are now able to say that the "Union" was too much for the enemies of the pursuit of bee-keeping!

Several "suits" have been allowed to go by default in justices courts, so that we could "appeal" them, and thus have the decision from the higher courts. This plan has been eminently successful, and productive of good.

The four cases enumerated in the foregoing matter are all that have been finally decided, and it is a record for every member to feel proud of—not one case has been decided against the bees!!!

This shows the value of united action, and the moral weight of the "backing" of the National Bee-Keepers' Union! Cannot all now see that the Union should have thirty thousand members, instead of three hundred!

Catalogues for 1887.—Those on our desk are from

Dr. J. P. H. Brown, Augusta, Ga.—18 pages—Apiarian Supplies, Bees, Queens, etc.
J. W. Bittenbender, Knoxville, Iowa—8 pages—Bee-Keepers' Supplies.

John A. Thornton, Lima, Ill.—Bees, Queens, etc.

George Pinney, Evergreen, Wis.—10 pages—Forest Trees and Tree Seeds.

A. C. Nellis, 64 Cortlandt St., New York. —Seeds.

If One has a Good Thing, which the people really need, the more widely he makes it known, the larger will be his sales; he will gain nothing by economizing in this matter, provided he advertises with good judgment.

Just as the forms of this issue of the *BEE JOURNAL* are ready for the press, we learn that the Canadian bee-lawsuit, mentioned on page 35, has been decided against Mr. Harrison. This was a neighborhood quarrel about the removal of a pig-pen, and bad temper was very evident on all sides. The Canadians raised a fund of \$50 to defend the suit, but what action (if any) was taken for its defense, our correspondent does not state.

Our Queries

With Replies thereto.

[It is quite useless to ask for answers to Queries in this Department in less time than one month. They have to wait their turn, be put in type, and sent in about a dozen at a time to each of those who answer them; get them returned, and then find space for them in the JOURNAL. If you are in a "hurry" for replies, do not ask for them to be inserted here.—ED.]

Bees Absolutely Quiet in Winter.

Query, No. 371.—Ought bees to be absolutely quiet when wintering in the best condition? I have placed some of my colonies in the cellar this winter, for the first time, and I can always hear a gentle hum by placing my ear near the entrance. Is that an alarming condition?—H. C. P.

Not absolutely so.—J. P. H. BROWN.
I should not be alarmed at it.—C. C. MILLER.

This gentle humming is not an objectionable symptom.—W. Z. HUTCHINSON.

The low hum that you hear is not a bad sign.—DADANT & SON.

It is very seldom that bees are "absolutely" quiet. A gentle hum is not an alarming condition.—H. D. CUTTING.

No. Bees always make a gentle humming noise if alive, no matter how quiet.—G. M. DOOLITTLE.

This gentle hum is usually heard when bees are in just that hibernating (?) condition most desirable. You may rest in peace, so long as it is thus.—A. J. COOK.

I have never been able to discover a colony that did not hum more or less. The gentler the hum the better are they enjoying their nap.—C. W. DAYTON.

Quietude is the natural condition of bees while in winter quarters. A low, gentle hum indicates high temperature in the hive. When the temperature falls a little, they will quiet down to perfect silence.—G. W. DEMAREE.

Bees hibernate when wintering in the best condition. In this state they are absolutely quiet as far as the eye can detect, except at feeding times. The imperceptible respiration is accompanied by a faint murmur that is more distinct where many colonies are placed close together, as in a cellar.—G. L. TINKER.

No. Sometimes they make a great deal of noise, and come out in nice condition. Much depends upon what causes them to make that noise. Disease causes restlessness, but restlessness does not always, nor usually, cause disease. Your bees are as quiet as is usual.—JAMES HEDDON.

My own opinion is that the nearer the bees can be kept to an absolute state of quietude, the better they will winter. In practice, a state of "absolute" quietness cannot be maintained. I apprehend, however, that

the "gentle hum" spoken of, will be found in every hive, in every winter, and that the same is not evidence at all of unfavorable conditions.—J. E. POND.

No. A "gentle hum" indicates contentment.—THE EDITOR.

Effect of Water in Bee-Cellars.

Query, No. 372.—1. Can a cellar be too dry for wintering bees? If so, can it be too wet? 2. Will a body of water on the floor of a well-cemented cellar increase, or diminish, the moisture of the air in the cellar?—F. WIS.

1. I do not think that it can. 2. It will increase the moisture.—J. P. H. BROWN.

1. Dryness or dampness have less to do with wintering than temperature. If the temperature can be kept from 43° to 47°, I should worry little about the other conditions.—G. M. DOOLITTLE.

I do not know that a cellar can be too dry or too wet. I should suppose that the water in the cellar would make the air more damp, but I may be wrong.—W. Z. HUTCHINSON.

We do not think that it can be too dry, but we think that it can be too wet. A standing body of water, if colder than the cellar, will absorb moisture.—DADANT & SON.

I should prefer a very dry cellar for bees. Yet I have known cellars to have 2 to 3 inches of water and yet the bees came through in good condition. 2. It will increase it.—H. D. CUTTING.

1. If the other conditions are right, I think that bees will winter in spite of humidity. 2. If the air and water are of the same temperature it will have no effect. But make the water the warmest, and saturation of the air will take place.—J. P. H. BROWN.

1. I hardly think so, if ventilation and temperature are all right. 2. I think it can. It depends upon the ventilation. Our cellar with its sub-earth ventilation has water in it all the time, but it is not unpleasantly damp. Some of the pleasantest and sweetest cellars I know of have large cisterns in them.—A. J. COOK.

1. A cellar cannot well be too dry or too wet for bees, if the temperature is suitable. 2. It would increase the humidity of the air; but heat and cold has so much to do with the relative humidity that much depends upon the temperature as to the degree of moisture in the air.—G. L. TINKER.

No; moisture will do no harm if the temperature is kept in harmony with it. Water thrown on the floor of my cellar would increase the humidity of the atmosphere therein, because it would soon dry off.—JAMES HEDDON.

1. I think not; bees always generate more or less moisture; I question also, whether it is possible, without using heat, to have a dry cellar. 2. Ordinarily it will; much will depend, however, upon other conditions, such as ventilation and warmth. The usual and ordinary effect of the water will be to keep the air warmer, and thus

tend somewhat toward making the temperature more equable.—J. E. POND.

1. Different persons hold different theories, but after all, do they really know anything about it? 2. Under some circumstances the water on the floor would certainly increase the moisture, and I can hardly think of any circumstances in which it would diminish it. There have been cases of successful wintering of bees in which a stream of running water in the cellar was believed to be helpful.—C. C. MILLER.

As temperature (not humidity) is the essential point in the cellar wintering of bees, let that be kept at from 45° to 50°.—THE EDITOR.

Extra Combs for Extracting.

Query, No. 373.—The coming season I will work 75 colonies for extracted honey, but I have no extra combs. 1. How shall I proceed to get combs built at the least expense? Should full sheets of foundation be used, or starters only? 2. Should the frames to be filled be placed above or beneath the brood-nest? If below, would there not be less drone comb built?—W. VA.

I should use full sheets of foundation placed beneath the brood-nest.—J. P. H. BROWN.

I use full sheets of foundation placed above the brood-chamber, and I have no trouble with drone comb.—H. D. CUTTING.

In a short and abundant honey-flow foundation is worth \$1 per pound. If it is light and continued you might extract often from fewer combs, and gradually work in frames with starters.—C. W. DAYTON.

In my locality I cannot get combs built in the natural way for extracting purposes, without sustaining very great loss in the way of surplus honey. 1. It pays well to employ full sheets of foundation to get a supply of extracting combs. 2. They should be placed above the brood-nest all the time.—G. W. DEMAREE.

I should use comb foundation, and I should not care where the frames were placed. We can secure many frames of comb in the spring before the season opens, by placing foundation right in the brood-chamber.—A. J. COOK.

1. In such a case I should use full sheets of foundation, placing them in the upper story when the honey harvest arrived, and raising a frame of brood to this story so as to secure immediate work there. 2. I should place them above.—G. M. DOOLITTLE.

I would use full sheets of foundation. I put it in above; you might try both ways. I would advise you not to prepare to produce extracted honey, but to work for comb honey, unless most of your surplus crop is dark.—JAMES HEDDON.

1. I do not know. The higher the price you get for honey, the more you can afford to use foundation. I think that there is more inducement to use foundation where the honey-flow is profuse and of short duration, than

uring a long-continued and moderate low. 2. I think that I would place them above.—C. C. MILLER.

I fear there would not be time to get a full set of combs built before the harvest, without using foundation. It may be mistaken. Some recent experiments lead me to hope that I am. It is my opinion that comb built under the brood-nest in the spring would be at once filled with brood, and whether drone comb would be built would probably depend upon the age of the queen and the amount of drone comb already possessed.—W. Z. HUTCHINSON.

1. I would use full sheets of foundation. 2. As soon as the colony is strong enough to build extra combs, I would place frames of foundation between the frames of brood, and add the frames as fast as they could be used. The foundation would not be wired. The super should be of the same size as the body of the hive, and the frames interchangeable. Use a queen-excluder between the cases, and continue to add frames below, and raise up the frames of brood until as many combs as needed are built.—G. L. TINKER.

1. This is a mooted question. I apprehend, however, that it will depend upon location. Mr. Hutchinson favors the "starter" idea; I have found full sheets to work better in my own case. Test the matter and report. 2. Place them above by all means; at least that is my own opinion. I do not think that any difference would be found in the amount of drone comb built, whether placed above or below.—J. E. POND.

Use full sheets of comb foundation in or above the brood-chamber.—THE EDITOR.

Correspondence.

This mark \odot indicates that the apiarist is located near the center of the State named; \odot north of the center; \odot south; \odot east; \odot west; and this \odot northeast; \odot northwest; \odot southeast; and \odot southwest of the center of the State mentioned.

For the American Bee Journal.

The Honey-Producers' Association.

M. M. BALDRIDGE.

Is there anything practical in the idea of an association of honey-producers to fix and control the prices on honey? Mr. Caldwell, on page 808 of the BEE JOURNAL for 1898, says "No, most emphatically." And why? Because "honey is one of the products of the farm, and, as such, it must be placed upon the market in precisely the same manner as any other product."

Well, let us see about this. Butter, I believe, is also one of the products of the farm. Now, is not the price of gilt-edge butter fixed and controlled

to a great extent, by an association of butter producers? If you do not think so, then study the proceedings of the butter producers, who, through their representatives, meet every Monday in Elgin, in this Fox river valley, and be convinced. This association not only regulates the price on all the butter made in factories, by its members, but likewise, to a great extent, that made by the farmers themselves—they who do not patronize the factory system. And how do we know this? Because all the dairy butter sold to consumers, in this Fox river valley, and elsewhere wherever these factories exist, goes up or down in price, according to grade, in perfect harmony with that of factory butter as given from week to week by the Elgin Board of Trade. Well, what is the present price of factory-made butter? For Monday, Dec. 20, the price per pound, at wholesale, as given officially, was 30½ cents, and that for Monday, Dec. 27, was 32 cents. And was much butter sold at such "extravagant" prices? I should say, yes. For Monday, Dec. 20, the sales, as given officially, were 68,794 pounds, and for Dec. 27, the sales aggregated 232,532 pounds!

Now, if butter producers can, through their representatives, fix and control the price of their farm product, why cannot honey producers, through their representatives, do likewise on gilt-edge honey? I say they can if they will it so. Yes, and they can do this with far less friction, and more successfully than butter producers. And why? Because the supply of butter never ceases—being produced every day in the year. Not so with honey; for when we once ascertain the supply of honey, at the close of each honey harvest, we are then assured that no more can be produced, with rare exceptions, until there comes another honey harvest. Then, by knowing the supply, ascertained mainly through the members of the honey-producers' association, and the probable demand, its committee can approximate pretty closely to the proper prices to fix upon it in the fall of the year, and without a weekly meeting as butter demands.

But, says Mr. C., we must place our honey "on the market" in precisely the same way that we do any other farm product, and not as you desire, to-wit: In the hands of retailers to be sold by them at fixed prices and only on commission.

Let us investigate this *must* idea. Because our parents and grand-parents used straw hives, brimstoned their bees, and took their honey to market in wash-tubs, is that any reason that we must do likewise? And because farmers generally sell their produce to middle men in order to reach consumers, is that any reason that honey producers must do so? As yet I have seen and read nothing that convinces me that honey producers cannot organize and agree among themselves to adopt new methods of dealing with consumers. It so happens that we live in an age of progression, and that we have the power, if we will it so, to adopt new methods

of doing business that might appear to some to be impossible and impracticable innovations. But we do not always know what we can do until we try. Then let us try, for awhile at least, what appears to me, and to many others, to be a very simple, practical, and common-sense method of disposing of our honey, to-wit: Have it sold at our prices to consumers, through retail agents, and by them only on commission.

"I am sorry," says Mr. C., that our honey "has gone down in price as it has this season." Well, whose fault is it? Mainly the fault of the honey producers! If they will not organize—if they will not pull together, if they will not quit flooding our large cities with honey, and if they will not stop patronizing the wholesale commission men, then they have no one to blame but themselves.

Mr. C. attributes the present low prices on honey to the good honey season; "one of the best" he has seen in his "14 years experience." Now, because the honey crop has been extra good perhaps, in his neighborhood, or in his county, or in his State, Mr. C. evidently infers that the honey yield has also been extra good throughout the United States! Honey producers should remember that the general crop of honey was not last year any above the average, and that when it is extra good in one locality, or in several localities, that there are still many other localities where it may be poor or be below the average. This has generally been the case, in the past, and will undoubtedly be the case in the future.

"Most bee-keepers," says Mr. C., "when their product is ready for the market, want the money for it, or its equivalent." That is true, but do they now get what they want? Do bee-keepers now get their money when they ship their product to the wholesale commission men? Not often, I can assure you. Then if not, why bring up this as an objection to an association of honey producers whose chief purpose is to fix a fair, honest price on honey to consumers based on supply and demand, and to hasten the disposition of it by having it placed and kept on sale by retailers everywhere and at all times. When every proper place for retailing honey in country, village, and city, is kept properly supplied with choice honey at all times, and at a reasonable fixed price, why should not the entire crop be disposed of each year even more readily than now?

"Now suppose," says Mr. C., that "the crop has been a good one," and the price of choice comb honey "is placed at 20 cents per pound, and the market price is only 10 cents." What is to be done? Why, my dear sir, you are supposing something that would not exist! How could "the market price" on honey be 10 cents when the universal price, in every State in the Union, is fixed by the honey producers of the United States at 20 cents?

And "what are we going to do," says Mr. C., "with the farmers and small honey producers?" Now, do not worry over that problem. The

farmers and small producers will not be slow in finding out that the large producers have adopted new tactics, and have quit fooling their honey away for less than its true value. They will not then be so anxious to hasten to market and sell the "stuff" at any price as now. The trouble at present is, they are afraid the large producers will flood the markets, and thereby cause low prices, and this simply makes them try to anticipate such a state of things. Another thing: Unless their honey is in small packages, of good quality, and in good condition, it will do no more harm to the wide-awake honey producer than the poor or unsightly butter made by farmers does to the gilt-edge commodity made in factories. But when the farmer and small producer adopts the one-comb sections, and has his honey in proper condition for the retail trade, and we find that their prices will do harm to large producers, then we had better buy their product. We can then place it upon the market and have it sold for us, by and through our agents, and at a profit.

Mr. C. seems to be afraid that the farmers may turn their attention to rearing bees and producing honey when they find they can sell the honey at good prices, and this will "crowd an already overstocked market." Such as his perhaps may be. This he thinks will make matters worse than they are at present. Now the overstocking of the markets with honey seems to be a great bug-bear to many, but not so to me. I have been too long in the honey trade to have any such fears. I do not believe that we can very well overstock the markets of the United States with choice comb honey, in case we distribute it properly, and see that it is kept on sale and in sight at all times, and in a presentable shape. The chief trouble at present is, as the Editor says, *unequal distribution*—coupled with the fact that the majority of retailers are entirely out of it nearly one-half of the time.

"There is," says Mr. C., "but one practical" way to accomplish "the desired end," and that is for a few rich bee-keepers to form a syndicate, buy all the honey, and make a "corner" on it. No, sir, we want no "corner" on honey, in the sense he indicates. Nor do we need a Vanderbilt. When our large honey producers once make up their minds to organize and pull in one direction, there will then be members enough in each and every honey-producing locality to buy out the mischief-makers therein, or to report such to head-quarters, when a way will be provided for protecting its members everywhere. I do not apprehend much trouble in that direction—still I may be mistaken. Suppose we give the plan a trial and find out! Reader, what say you?

St. Charles, 3 Ills.

All New Subscriptions will begin with the year, and until further notice we will send the back numbers from January 1, unless otherwise ordered.

For the American Bee Journal.

Northern Illinois Convention.

C. M. HOLLINGSWORTH.

The regular annual meeting of the Northern Illinois Bee-Keepers' Association was held at Rockford, Ills., on Jan. 18 and 19, 1887, and the writer was appointed to prepare for the BEE JOURNAL a summary of the discussions on topics of general interest. Dr. C. C. Miller was present, and was constantly called upon for his views and experiences, which he gave in an entertaining and instructive manner.

BEEES AND PLANTS.

Mr. A. J. Swezey first read a well-prepared essay on the agency of bees and other insects in the fertilization and cross-fertilization of plants. Mr. S., who is a fruit-grower, had formerly believed that bees do some harm to fruit-growers, without being in any way beneficial. But investigation of the subject by reading and observation had convinced him that the harm they do is very trifling compared with the good they do to the fruit interests.

Dr. Miller asked if there was any plant which was known to depend solely on the visits of the hive-bee for its fertility.

Mr. Hollingsworth cited Darwin's experiments with white clover. In one case a number of heads that had been protected by a net produced but few seeds, and in another case, no seeds; while heads outside the net, in both cases, which bees had been seen to visit, seeded abundantly—bees being the only insects mentioned by Darwin as having been seen on the plants. But experiment has also shown that, even with plants which are capable of self-fertilization, the crossing of one individual with another by the agency of insects is of great benefit, causing them to produce more and better seed, larger and sounder fruit, and more vigorous plants in the succeeding generation.

Dr. Miller said that he felt sure that even bee-keepers themselves were not fully aware of the importance of the office which bees perform in this way. If it is a fact that white clover depends as much upon the presence of hive-bees as red clover does upon the presence of bumble-bees for the production of seed, the fact is of the first importance to farmers and dairymen. To take away the bees would be to take away the white clover from their pasture fields.

ITALIAN VS. BLACK BEES.

It was admitted that the black or German bees go more readily into the sections and produce a fancier article of comb honey. But Mr. Lee thought that they carried too much of the honey into the supers, leaving the brood-chamber poorly supplied for winter. He preferred to keep Italians only, if for nothing else, on account of their better disposition.

President Whittlesey said that the Italians would gather the most honey in a poor season.

Dr. Miller, without attempting to establish or maintain any particular strain of bees, makes a practice of buying, each year, one of the best imported Italian queens that can be had, thus constantly securing the advantage of fresh blood, and the further advantage of pure blood, if there is such a thing in bees.

MARKETING AND SHIPPING HONEY.

Mr. Highbarger had this season sold 5,000 pounds near his home, by taking it around in a wagon through the country, and to the nearest villages. He sold comb honey at from 10 to 12 cents, and extracted at 8 cents per pound. Mr. Hollingsworth, in the village of Winnebago, had, by advertising with postal cards, sold 1,500 pounds at the apiary, besides 600 pounds at the village stores, which was a large increase over the home sales of last year.

Dr. Miller discovered a few years ago that commission men in the large cities made a practice of under-quoting the market, so that their customers would be the better pleased with the price obtained for shipment. This often had the effect of fixing the price in the country markets below what it should be. He further showed that some producers make the mistake of always putting the local price at the price in the large markets less the cost of shipment to those markets. But in localities where there is a deficiency, the local price should be the city price plus the cost of shipment. The idea that producers could combine to fix the general price of honey met with no support whatever.

With regard to the shipment of comb honey, the views brought out were, that when sent by express it is apt to be damaged by hurried and careless handling; when sent by freight and transferred on the way, it is liable to suffer from improper packing in the car by those who make the transfer; and when properly loaded and sent by freight without transfer, there is very little risk. Thus a large shipment can be sent more safely than a small one.

In an essay on "Bee-Keeping as a Pursuit," Mr. Fuller said that he had only followed it in connection with farming, but considered it, when well-managed, as profitable as other pursuits.

HIVE BOTTOM-BOARDS.

A distinction was made between loose bottom-boards and those that are not loose but movable. A vote showed a large majority against having the bottom-board nailed on the hive. In moving hives with loose bottom-boards, Mr. Gammon used a large U-shaped iron clamp with a set-screw at one end to clamp the hive and bottom together. Mr. Rice used two ropes and sticks and a wedge for the same purpose.

Mr. Hollingsworth had Langstroth hives with bottom-boards that were removable, but not loose. The bottom of the portico is nailed on like the top, and the two give the hive stiffness. In its back edge are two small auger holes to receive project-

ing headless-nails driven into the front edge of the main bottom; and two long wooden buttons with square notches on the back end of the hive, hook on projecting nails in the back end of the bottom-board.

REVERSIBLE HIVES.

Dr. Miller had tried an invertible hive last summer. It had some good points, but with all his inverting and re-inverting he failed to make the bees understand what was wanted of them; they would not work in the sections.

Mr. Gammon had last summer tried a sectional hive; but when he undertook, by interchanging the parts, to have the honey carried from the brood-department into the sections, he failed entirely. He had never had a hive become so clogged with honey to the restriction of the queen. He had also fitted a set of ordinary frames for reversing. When he first reversed them, he found one capped queen-cell, which he removed, and others started. A day or two later he found the bees had destroyed the latter, and was much elated, thinking that he had found an easy preventive of swarming. But about the time the first queen-cell should have hatched, out they went, and they kept on swarming, and at last killed their own queen.

ALSIKE CLOVER.

From ten years' experience, Mr. Lewis pronounced this one of the very best grasses for hay and pasture, especially on low ground. For hay it should be sowed with timothy, which helps to hold it up. Sow 1 bushel of seed to 16 acres. It makes but one crop of hay, does not turn dark in curing, and stock eat it up clean. It will re-seed itself indefinitely.

Dr. Miller had not succeeded in getting it to grow, and it did not re-seed itself for him.

Both Mr. Lewis and Mr. Highbarger gave good reports of the Alsike as a honey-plant. They thought that it was better than white clover, and less affected by drouth.

The President of the association for the ensuing year is Mr. L. Highbarger, of Adaline, Ills.; and the Secretary is Mr. D. A. Fuller, of Cherry Valley, Ills.

Winnebago, & Ills.

For the American Bee Journal.

Bees in Winter Quarters.

V. W. CLOUGH.

Winter quarters should exclude light, and from the time they are put away in the fall until removed in the spring, the room should remain dark. This will keep them quiet, even during warm days. After being prepared for winter, I do not want my bees to have any light.

The repository should be so constructed that the variations of temperature will be gradual. Sudden changes should be avoided. Cold

weather is not injurious to bees, but the mischief lies in the rapid change of temperature. Any old shed, coal-house, or in fact any building that can be darkened answers the purpose. Noise does not disturb the bees, if the hives are not jarred.

To those who have large numbers of colonies I recommend for winter quarters a building on the plan of an ice-house—the walls being packed with sawdust, perfectly air-tight at the bottom, with a small ventilator at the top, without any light-holes as windows, so that when the door is closed the bees will be in a perfectly dark room.

Geneseo, & Ills.

Vermont Convention.

The Vermont Bee-Keepers' Association met at Burlington, Vt., on Jan. 13, 1887. President P. C. Abbott occupied the chair, and congratulated the association on having started from the humble position of a small Addison county association and risen to the dignity of a State organization, so that every bee-keeper in the State might have the benefit of associated effort and experience.

The first essay read was by J. H. Larabee, on "In Embryo," which contained valuable advice, intended especially for beginners in apiculture.

A. E. Manum discussed the subject of "The brood-chamber from April 1 to Aug. 1," giving his methods of strengthening weak colonies in the spring, preparations for the collection of surplus honey, and extending to the close of the honey harvest, preparation for winter, etc. The subject was fully discussed.

"Cellar vs. out-door wintering" was the subject of a discussion, led by Dr. F. Bond, of Cornwall, who favored cellar wintering, although he thought it best to be governed by circumstances. His apiary was located in a windy place, so that he used a cellar. It was well to economize heat to save honey. He put his colonies in the cellar just after the ground froze, and took them out about April 10, or when the weather was warm enough for the bees to work. He did not pay much attention to ventilation.

F. M. Wright, of Enosburgh, found it necessary to ventilate, and recommended upward ventilation from the floor. He did not put his bees out until about the last of April. He placed a quilt over the frames and raised the hive off from the bottom-board.

The question was further discussed by Messrs. Leonard, Manum and Crane, the weight of opinion being in favor of wintering in the cellar. Mr. Crane gave his views on the condition of the temperature as governing the amount of moisture held by the atmosphere. A cubic foot of air at 10° would hold in suspense about one-fifth of a grain of water and a rise in the temperature will largely increase the amount of moisture that will be held.

Adjourned until evening.

"Shall we feed sugar or honey when hives are deficient in winter stores?" was discussed by Messrs. Crane, Bond, Leonard, Davis and others, the weight of opinion favoring honey as the best and cheapest.

Miss M. A. Douglas, of Shoreham, read an essay on "How shall we market our honey?" She admitted that she was undecided whether it was better to sell individually or through an association. She was strongly in favor, however, of placing a first-class article on the market in preference to adapting the quality of the supply to the demand. This essay took the first prize, and will be published later.

Mr. Leonard led the discussion on "What is the best method of requeening colonies?" From the best colonies he took sealed queen-cells in the swarming season, and put them into a cage in the middle of a queenless colony to hatch. A frame with divisions both ways covered on one side with wire cloth, and on the other with a board or slats was used for this purpose. He introduced the queens into the hives in an introducing cage.

Mr. Manum favored the introduction of fertile queens, which he placed in a cage over a frame of unsealed honey and unhatched bees. He then cut a hole in the frame and placed it in the colony, and the bees would work their way through to the queen. Sometimes the bees would seal the hole up, when the hatching bees and queen could feed on the unsealed honey, and the queens could lay in the cells deserted by the young bees. The discussion was continued by Messrs. Holmes, Hall and others.

Adjourned until 9 a.m.

The first business of the second day was the report of the Secretary, which showed that the expense of the present convention amounted to \$13.27, of which \$3 had been received. The Treasurer's report showed \$7.27 in the treasury, leaving a deficiency of \$3. The above reports were accepted and adopted, and a contribution taken at the time was sufficient to defray all expenses and leave a balance in the Treasurer's hands.

The following were elected officers of the association for the ensuing year: President, P. C. Abbot, of Essex; Vice-Presidents, F. M. Wright, of Enosburgh; D. S. Hall, of South Cabot; J. E. Crane, of Middlebury; Secretary, R. H. Holmes, of Shoreham; Treasurer, J. E. Crane, of Middlebury.

An essay by J. H. Martin, of Hartford, N. Y., entitled "The exhibition of honey at the county fairs," was read by the Secretary. He noticed the fact that the eastern bee-keeper finds a sharp competitor in the western producer, as there they have a longer honey-flow and a cheaper mode of living, so that they can put their crop on our eastern markets at what seems to us ruinously low prices; he thought we should advertise by exhibiting at our county fairs, and push our business with the same enterprise that the dry-goods merchant does his, and, in order to maintain living prices, high-pressure methods would have to be resorted to.

E. O. Tuttle, of Bristol, presented the subject of "How to conduct conventions," etc.

A. E. Manum presented the claims of the Chapman honey-plant.

Prof. W. W. Cooke, the State chemist, presented a valuable essay on "Honey-production by plants."

After the adoption of some resolutions, the convention adjourned to meet at the call of the executive committee.

Union Convention at Albany, N. Y.

The New York State, the Eastern New York, and the New Jersey and Eastern Bee-Keepers' Associations convened at Albany, N. Y., on Jan. 11, 1887, with President Clark in the chair. After the routine business, an essay by C. M. Goodspeed was read on

ALSIKE CLOVER AS A HONEY-PLANT.

He said that Alsike comes in before basswood, and is in its prime by July 10. It blossoms very freely, and yields more honey than white clover, and as much as basswood. He esteemed it next to basswood. The amount of Alsike honey in his whole crop was variable; sometimes all the white honey was tinged with Alsike; at other times only a portion of the lower part would be. As feed for stock there was no better. His first crop was sowed late, and wet in curing, yet his cattle ate it in preference to his best-cured hay. It should be sowed with other grasses, and cut late. It seeds rather poorly, and does not do well on light soil, but on moist land there is an immense yield of rich fodder and fine honey.

A. I. Root had eight acres of Alsike on rather dry soil near Columbus, and from it obtained a rich crop of honey when his neighbors had none. It makes fine forage, especially for milch cows, and a small amount goes a great way. As pasture it is excellent, increasing the flow of milk.

John Aspinwall had seen it growing in St. Lawrence county, and was told by the farmers that it did better than other grasses.

T. F. Bingham said it was much raised for sheep in his State, and to some extent for cows. He had fed it to three horses, and they did better on Alsike and a little grain than on the best timothy or herds-grass and more grain. For bees he preferred it to either white or red clover.

H. N. Waters had raised it for 10 or 12 years, and found it succeeded best on wet soil.

L. C. Root said that good farmers like Alsike because it attracts the bees, and so a more perfect seeding is obtained. A farmer told him that his cattle would eat weather-stained Alsike in preference to his brightest and best-cured hay. He had secured honey from his clover by the ton, and it cannot be surpassed; the flavor is of the finest—better than that from basswood, though not as white. In Herkimer county it grows by the roadside as common as white clover. On dry soils it will not last long, but on moist it becomes permanent. In

growing Alsike, the interests of farmer and bee-keeper were identical.

R. Bacon said that farmers near Oneida Lake were growing Alsike to a large extent. Their subsoil was clay. His honey had been greatly improved by Alsike.

Secretary Knickerbocker said the yield was from two to three tons per acre.

M. D. West sowed two acres to Alsike, with one-third timothy. The hay was as described, and had a remarkably rich odor when put in the barn. The Alsike remained in land three years. The bees did not work upon it. Afterward he saw bees on roadside Alsike.

A member said that Alsike secreted more honey on light soils than on heavy. Five years ago he persuaded a number of farmers to try Alsike. The store-keeper was then selling 15 bags of red clover seed. Last year he sold 20 of Alsike and 4 bags of red clover.

President W. E. Clark sowed a piece, 12 years ago, to Alsike and timothy. Had cut good crops every year, and that of last year was the best of all. Last spring, when other grasses were heaved, Alsike was not, and after rolling, it was a perfect mat. Cut it July 22, and the bees worked on the aftermath until October.

Hiram Chapman spoke at length on the honey qualities of a perennial, known as *Echinops sphaerocephalus*, or the "Hedge-hog-plant," which is fully described on page 28 of the BEE JOURNAL.

RENDERING OLD COMB INTO WAX.

Ira Barber uses a large kettle, holding 25 pails of water, and melts up the old comb from 20 to 25 hives at once, putting in only a few combs at a time; keeps a good fire, but not to boil; takes out with an 8x10 inch basket; strains as fast as dipped, and cools in large dishes.

A. I. Root said the solar wax extractor was for small bits of wax thrown in from time to time and melted by the heat of the sun. If thrown in each day there would be no accumulation of rubbish. Old, hard combs were tried, the thermometer run up to boiling point, and all the wax taken out. It will work in January under cover.

COMMISSION MEN.

An essay by C. F. Muth was read. Mr. M. is one of the largest dealers in honey at the West, and a practical bee-keeper. He regarded the middle man as a necessity, a benefactor to the producer, and not a leech, working up a demand for bee-products which the producer usually had not time for, and often not the ability. Their interests are sympathetic, and they should be in full agreement.

A. I. Root said that some men could retail their honey profitably, while others could not. The latter need the middle men. He said that Mr. Muth had had great success in selling honey, and was honorable in his dealings.

R. Bacon said that the market was injured by small growers, who trade off their honey early in the season for

what the store-keeper will pay, and then this price is used to beat down the larger growers.

J. Aspinwall said that the market quotations for honey were wrong, in that the large dealers' figures govern the small sales.

H. Segelken said that the price of honey was governed by the price of other sweets. When the latter recover from their depression, honey will also improve.

A. I. Root said we must educate the young bee-keeper in marketing his products. He often bought up the small lots to prevent their depressing the market, selling them afterwards at a slight advance, or even at the same figure, to a customer who wanted a cheaper article, and holding his price on his best goods. Had sold some of these lots at 15 to 18 cents. We need better acquaintance with each other, and better education in business methods.

MARKETING HONEY.

H. R. Wright, a wholesale dealer of Albany, said that there was an over-production of honey because it had not yet become a staple article. There was a great need of a uniform style of comb and package. The pound comb was too large for this market, a $\frac{3}{4}$ -pound comb being enough for an average family at one time, and he favored selling by the comb instead of by the pound. A package that could be sold at 10 cents would be in steady demand. The several hundred styles of boxes and cases interfere with quick sales. He showed a sample of a box that he preferred—a plain case 4x5 $\frac{1}{4}$ inches, holding 11 ounces. The oblong is more salable than the square, and people do not wish to pay for extra wood or glass. As the selling season is before the holidays, glass is not needed, unless the honey is to be carried over. He urged the convention to adopt a uniform package. The odd styles had to be sold separately and slowly. He thought extracted honey was improperly named. Liquid honey was a better term. The public associated the word with other "extracts" of commerce, in which there is often adulteration.

L. C. Root said Mr. Wright's talk was another evidence that when we try to help others, we always help ourselves. We were getting at facts which would help both producer, dealer and consumer. It was evident that our markets were far apart. Mr. Wright was the first man he had heard advocate unglazed boxes. In New York they require them glazed, and prefer one and two-pound sizes.

Thomas Pierce, of Gansevoort, and several others, thought sales should be by weight and not by piece. Buyers were used to the pound method, and would expect a given weight in the small packages.

Mr. Wright explained that there was no deception in selling by the comb. People bought the small combs as they did canned goods, and understood it. The weight of honey in combs was variable, and the so-called one and two pound boxes would not run evenly.

A. I. Root said that this discussion was one of the finest features of the convention. As the introducer of the one-pound package, he well remembered the opposition it encountered from dealers and others, but that was overcome. In managing a general store, he had found 10-cent packages and articles very salable and profitable, even at small margin; and there was no reason why the 10-cent honey package should not be equally popular.

J. A. Abbott, of England, said the sales there were in proportion of 1,000 one-pound to 300 two-pound boxes.

DEPRESSION IN THE HONEY MARKET.

L. C. Root said: In early days when the five to ten-pound boxes were in use, the honey was well sealed and of better character than that produced by the new methods. But they could not be divided without waste and trouble. When the single comb came into use consumers were willing to pay for glass on each section. Then bee-keepers got enthusiastic about extracting honey by centrifugal force. But gradually the price of the latter went down because of inferior quality and adulteration. Honey handled in large cities by unskilled persons has hurt the market, and we have failed to secure the attendance and co-operation of dealers at our meetings. The cost of production must be reduced and better packages devised. Liquid honey must be shipped in sealed packages; combs perfectly capped and sealed.

J. W. Porter laid the chief cause of depression in general, as well as that in the honey market, to limited coinage, sustaining his point with many financial and historical facts.

R. Bacon said our people were not educated in honey-eating; not one in twenty uses it. If every person would consume but a pound a year, the demand could not be supplied. Strikes were making a great difference in our sales; the thousands out of work have no money to buy honey or anything else.

RELATIVE VALUE OF EXTRACTED HONEY.

An essay by Dadant & Son was read. As compared with comb honey, the extracted takes the lead for use as a syrup on cakes, etc., and is more in general use than the comb. The beauty of the latter has kept up the price. Where dark honey abounds the extracted is more used. Would rather produce extracted at 6 cents than comb honey at 12 cents.

BEE-KEEPING IN THE FUTURE.

An essay by A. E. Manum was read. Fifteen years ago one ton of honey was a large shipment for a beekeeper; now a carload is not noticed. Fifteen years ago the price was 30 cents a pound; now it is 15 cents, and likely to go still lower. But as an offset, we have an increase of consumption and a lessening of the cost of production.

We must become specialists; one devote himself to comb, another to extracted, another to brood-rearing. In

this way failure will be reduced to a minimum, and the future will depend upon the amount of brain power exerted.

L. C. Root said that economy was the word for the hour, even though the most economical people of the world are refused a place on this continent. Bee-keepers are restive because they have to sell low. Luck is a good word when *p* is put before it.

VENTILATING BEE-CELLARS.

L. C. Root said that pure air was a necessity, but if let in through tubes it produced disturbance. He preferred to withdraw the impure air, and did it by pipes attached to the stove-pipe. The colder air will press in whether there are ventilators or not.

R. Bacon's first ventilators were of plank nailed together, which brought in air from the outside. Next he used pipes carried under ground 100 feet. Now he makes his walls as tight as possible, and has closed up the sub-earth air-pipes, using a 5-inch pipe to conduct the impure air off. He finds a strong pressure of air in this pipe. He keeps the temperature at about 40°; hives are set close, with inch holes in the bottom-board. He has 80 hives in a space of 10x17 feet.

Mr. Adams, of Troy, has lost many bees, and does not use cellars any more. Has lately built a house costing \$300. The room above is only clap-boarded; that below is of brick, plastered; heats with a stove, and bees are wintering well. Put them in Nov. 13, and has not had over a quart of dead ones. Bees need more ventilation than they now get. He gives one-inch holes to hives. The proper temperature is 50°, which will drop to 40° at night.

OUTLOOK OF BEE-KEEPING.

L. C. Root—The trouble with our business is *under-consumption*, not *over-production*. In the future honey can and will compete successfully with all other sweets.

J. H. Martin read some census statistics showing the annual production of butter to be 107,873,000 pounds; maple sugar, 9,272,000; eggs, 3,000,000, and honey, 1,149,000 pounds—a mere taste if fully distributed. If the producers of each county would combine and put their products on the home market, there would be none left for export.

F. L. Smith said: We are behind the times. When I was at Toronto, three years ago, I saw over fifty tons of honey on exhibition. Who has seen two tons at any of our State or county fairs? ("Twenty pounds at the Utica State Fair," remarked L. C. Root.) Let us stop talking about low prices, educate the people and educate ourselves.

BEEES IN LAW.

A member said that his neighbor, a retired banker, had brought a lawsuit against him for not removing his bees. The distance was 85 feet. The neighbor on the other side (distant 75 feet) was not troubled. He has 145 colonies, but the banker claims that one colony is as bad as one hundred.

Mr. West had hives in a neighbor's mowing field, and he used to mow around the hives, until the neighbor himself brought his team after sundown and cut it. He also helped his neighbor put up the hay.

L. C. Root would avoid all litigation if possible. Would show objectors the necessity of the business, and would rent their land if it could be had.

F. L. Smith once had a similar trouble with a neighbor; but the neighbor had a daughter and he had a son, and they settled the whole thing so satisfactory that he and his neighbor had been good friends ever since.

The report of the committee on exhibits was severely criticized because it passed over all patented articles, and the meeting sent it back to the committee for correction.

The officers for the ensuing year are: President, W. E. Clark, of Oriskany; Vice-President, Ira Barber, of De Kalb Junction; Secretary, Geo. H. Knickerbocker, of Pine Plains; Treasurer, I. L. Scofield, Chenango Bridge.

Adjourned to meet at Utica, in 1888.

Colorado State Convention.

The State association met at Denver on Jan. 17, 1887.

The society was reorganized, a new constitution and by-laws adopted, and the Secretary ordered to take steps for incorporation.

On the Secretary's list there are over 200 bee-keepers who own 3,500 colonies of bees. He thinks there are over 6,000 colonies in the State, owned by 500 bee-keepers. Two Greeley men have 150, and sell over 12,000 pounds of honey annually.

The following officers were elected: President, Dr. D. W. King, Boulder; Vice-President, at large, E. Millison, Denver; Secretary, S. C. W. Shiff, Denver; Treasurer, William Davis, Denver.

County Vice-Presidents: W. L. Porter, Weld; V. De Vinney, Jefferson; W. K. Sinton, El Paso; C. C. Lounsberry, Larimer; G. W. Swink, Bent; D. S. Grimes, Arapahoe; W. E. Pabor, Mesa; E. J. Post, Huerfano; Miss Matie Sternberg, Boulder.

There was considerable discussion over the enemies of bees. Toads were considered the worst. The President said he had experimented with them; he had taken the toads and marked them so that he should know them if they returned. These toads were carried across a creek 1,000 feet away and 15 feet wide, yet in a short time they had returned. It was best to have the hive a few inches above the ground, with a sloping board, so that they could get up to it on returning home at times when they could not fly well.

Adjourned to March 3, 1887.

The next meeting of the Hardin County Bee-Keepers' Association will be held in Eldora, Iowa, on Feb. 12, 1887, at G. W. Ward's office, at 10 a.m. Our monthly meetings are very interesting, and we hope for a large attendance.

J. W. BUCHANAN, Sec.

Local Convention Directory.

1887. *Time and place of Meeting.*
 Feb. 12.—Hardin County, at Eldora, Iowa.
 J. W. Buchanan, Sec., Eldora, Iowa.
 Mar. 3, 4.—Pan-Handle, at Wheeling, W. Va.
 W. L. Kinsey, Sec., Blaine, O.

☛ In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—Ed.

SELECTIONS FROM OUR LETTER BOX

Working up Home Markets.—J. H. Martin, Hartford, Conn., N. Y., says:

It seems to me that bee-keepers are away behind other trades in their methods of pushing their products upon the market. If honey goes begging for a market, it is because too many adopt the sit-down-and-do-nothing policy. If bee-keepers would commence with their county fairs, and work them up thoroughly, and then after the fairs work up every town near them, there would be but little honey to be sent to commission men. I think that I know about this, for I speak from experience.

Bees in Splendid Condition.—S. Valentine & Sons, Hagerstown, Md., on Jan. 24, 1887, write:

It now has been nearly 3 months that our bees have been without a flight, but on Saturday, Jan. 23, the weather was pleasant, and the bees had a good flight. On Sunday morning it continued pleasant and they were out early. Through the day the mercury rose to 62°, and the bees had a splendid opportunity to clean up their hives; they made good use of it, and were ready for gathering before the day was past. Bees have wintered nicely so far; in fact we never saw them in better condition. Colonies have lost very few bees since they were prepared for winter, and the hives seem as clean and sweet as they were in the fall. We have lost 3 colonies out of 310, but in every case it was our fault. We let them get out of honey, and very naturally death must be the result. We shall try to be more kind hereafter.

Superiority of Italian Bees, etc.—15—L. G. Purvis, (48-75), Forest City, Mo., on Jan. 24, 1887, writes:

I commenced the season of 1886 with 48 colonies, some very weak, a few very strong, and the rest of medium strength. I obtained 5,450 pounds of extracted honey, and 150 pounds in sections, and increased my apiary by natural swarming to 75 colonies. Honey sold at an average of 10 cents per pound for extracted, and 15 cents for comb honey. This is rather a favorable location for the bee-business in some respects. I am 28 miles northwest of St. Joseph, Mo. We have an abundance of willow,

soft maple, cotton-wood, elm, a great deal of fruit bloom, and later, honey locust; then white clover and linden. In the fall we have heart's-ease, goldenrod and Spanish-needle, the latter being the most important. We also have a great variety of other flowers that yield honey more or less. Our market is handy. I sell $\frac{1}{4}$ of my honey from my wagon in Kansas and Nebraska. From my experience of 15 years I am fully convinced of the superiority of Italian bees. One correspondent, I believe, said that the Italians were more inclined to rob than the blacks. His experience is exactly the opposite of mine, for in nearly every instance in my experience the black bees are the ones that are thieving, or trying to. When honey is abundant in the flowers, there is not much difference in the quantity of honey stored; but when honey is scarce, the Italians and hybrids will be gaining a little when the blacks are at a stand-still or going backwards.

Not Overstocked with Bees.—Andrew Craig, Empire, Dak., on Jan. 17, 1887, says:

The past summer was one of unusual drouth and heat, and unfavorable for bees, and so far the winter has been unusually severe. I had one colony last spring which cast a swarm on June 15, and I had to feed both of them for winter. They are packed with prairie hay. I hope they will winter, although I have some fears for their safety. They have not had a flight since Nov. 5. There is not a bee-keeper within 30 miles of here; so I have to learn the business alone, by reading and experimenting. I have made some mistakes, one of which was in the width of the top-bars of the brood-frames, which I made too wide; but I intend to remedy it in the spring.

Bees Wintering Well.—Dr. H. Besse, Delaware, Ohio, on Jan. 31, 1887, writes:

My bees are wintering well so far. Last October I built a bee-house for them; it is 20x24 feet. On Nov. 18 I put 161 colonies into it. I keep the temperature at 44°, on an average; the lowest has been 38°, and the highest 56°. I use no artificial heat, but govern the temperature by ventilators. At some future time I may give you a full account of my bee-house. It is a "daisy."

Selling Honey.—Daniel Whitmer, South Bend, Ind., writes:

Were it not for some injudicious bee-keepers the market in this locality would be much better than it is at present. Two years ago I got 17 cents for comb, and 12 $\frac{1}{2}$ cents per pound for extracted honey. But suddenly there appeared a man who was very deficient in wisdom, from Michigan, and sold his at 12 $\frac{1}{2}$ cents per pound, and finally as low as 9 and 10 cents. Now where is my profit? The mar-

ket is ruined in this place, and it has been done by men that understand the bee-business—men that produce honey by the ton. In several instances I have instructed men in apiculture, and as a remuneration for the information given, they have in every instance undersold me in the disposition of their crop of honey. I do not fear the slipshod, and old-fashioned honey-producers, but men that know something; some that even have farms, and are dealers in live stock; men who are making money out of farm products. But what do they care for the bee-specialist, or their own honey crop, just so they get it disposed of is what they are after. Some may think that I am severe, but I mean business! I have become disgusted at the movements of some who ought to know better!

Only an Average Season.—I. N. Rogers, Jackson, Mich., on Jan. 31, 1887, says:

The past season was only an average one in this county, although commencing two weeks earlier than usual. I never had bees build up to overflowing so early since I have kept them. One colony of hybrids cast a large swarm on May 8, and another on May 10. A colony of black bees cast 2 swarms in May, and stored 40 pounds of comb honey in sections by the middle of June, when the drouth came and continued until the middle of August. During this drouth bees hardly held their own, some of them having to be fed. Basswood was a failure. Fall flowers yielded a good harvest.

Commission Men Ought to be Our Friends.—Dr. C. C. Miller, Marengo, Ill., on Jan. 29, 1887, writes thus:

If I understand it correctly, what is complained of on page 57, is the remarks made about putting certain lots of honey on the Kansas City market. Now I can see nothing objectionable in the matter of telling what is put on the market and when; indeed, what we want is the fullest information about everything pertaining to the business. If there is any thing stated that is not correct, of course the correction should be made, just as any incorrect statement in any part of the columns of the BEE JOURNAL should be corrected. What we want is the full truth. Let us not be unreasonable with the commission men. They are our friends, or ought to be. Simply let them know that if incorrect reports are given they are likely to be looked after.

Bees in a Cave, etc.—John Turnbull, La Crescent, Minn., on Jan. 13, 1887, writes:

I began with 19 colonies last spring, and I now have 59, all by natural swarming, except 5 nuclei. I had 2 colonies the combs of which melted down on July 5. Bees did well during white clover, but very little in the fall. Some of my late swarms were

short of stores. I took 1,000 pounds of comb honey in 1 and $1\frac{1}{2}$ pound sections. My first 150 pounds of honey I sold for 15 and 16 cents per pound. Afterward honey was crowded into the city, so that it was sold as low as 8 and 10 cents per pound, and in trade at that. I have sold the most of mine for 14 and 15 cents per pound. I think that I can sell what I have left for that price. I built a bee-cave in the side of a hill. I put up boards in front to keep up the bank, and then put logs on for a roof, laying the logs close together. I then put 2 feet of straw and 2 feet of earth on the logs, then a shingle roof over all. It is 10x16 feet, 7 feet in the clear, with a hall 6 feet leading into the cave, with two doors. The temperature is from 30° to 30° below zero outside; in the cave it is now 40° above zero. I have a box in it 8x4 inches, inside measure, for a ventilator. The bees are very quiet. I had always wintered my bees in the cellar. There is nothing to disturb them in the cave.

Dry Season in Missouri.—J. W. Johnson, McFall, Mo., on Jan. 26, 1887, writes:

The past season was a poor one here for bees. I have nearly 40 colonies in the cellar in good condition. We are hoping for a good season this year, for we need honey, and that means money. I think that only a few bees will winter, because it was so dry last season, and the most of the bees are kept in logs or box-hives, and their keepers robbed them too close in the forepart of the season. My health is so poor that I cannot tell whether I will get any honey or not next season, although it may be a good season for the bees. It is said by some that bee-keeping is a good thing for invalids. I was in the late war, and I sometimes wonder whether any of my old comrades keep bees.

[Yes; hundreds of them are engaged in keeping bees and producing honey.—Ed.]

Severe Weather, etc.—S. W. Rich, Hobart, N. Y., on Jan. 31, 1887, says:

We have had some very severe weather here this winter, but as our bees were in excellent condition in the fall, I predict that they will winter well, as they appear to be doing nicely now. Last season was very unfavorable here, as the crop was very light and of poor quality. We hope for a better crop next season.

Fixing the Price of Honey.—Wm. H. Balch, of Oran, N. Y., writes:

A year ago last fall a well known egg-buyer told me that he had found a few hundred pounds of honey in a back place that he could buy for a small sum for cash. He wrote to a certain prominent commission merchant in New York city, telling him what honey could be bought for in central New York. One of my fel-

low-bee-keepers wrote to this same commission merchant, asking him what honey was worth. He named a mere pittance, and referred him to what the egg-buyer said that honey could be bought for in central New York. Again, a man with a few pounds of inferior honey, and in bad shape, will take it to town, and haul it around and shout, "What will you give for honey?" Still another, with a few colonies of bees will have his honey in proper shape, and take it to the grocer and say, "I must have some groceries; give me what you can for my honey." The grocer is in direct communication with the New York commission house; of this I have had them tell me, in the better days of bee-keeping. I think that Mr. B. H. Standish, on page 25, is about right.

Clipping Young Queens' Wings.—Jno. D. Gehring, Parkville, Mo., writes:

In all the bee-books which I have read, and in all the bee-papers to which I have had access, I nowhere have found any noticeable mention made of this most important fact, viz: Queens' wings clipped before they are fertilized, are utterly worthless! Old bee-keepers may laugh at this statement, so strongly made, until they reflect that there was a time when they, too, had to learn this from expensive experience; but it seems to me these same old bee-keepers were a little dull when they forgot to caution beginners not to clip a queen's wing before she has begun to lay.

Young Bees Hatching.—J. A. Buchanan, Holliday's Cove, W. Va., on Jan. 22, 1886, writes:

Bees are having a grand "romp" in the open air. The temperature is 65° above zero in the shade, with the sun bright and warm. The bees are in splendid condition. I opened a few hives and found that the queens were all laying, and in a few instances some 1887 young bees were hatching. Clover is not yet injured by the winter, which makes good prospects for the coming season.

Extracted Honey in Glass Pails.—John Rey, East Saginaw, Mich., on Jan. 21, 1887, writes:

For selling extracted honey I would like to have every bee-keeper in or near a city, try glass pails. It is a nice way to put up extracted honey, and it will almost sell itself. Of course a label with the bee-keeper's address should be on every pail. It is the best way for me to handle choice extracted honey in my home market, and it brings the price of extracted honey up from 12 cents to 14 cents per pound. I use pails holding $\frac{1}{2}$ pint, $\frac{3}{4}$ pint, and 1 pint. The $\frac{1}{2}$ pint pail holds 10 ounces; the $\frac{3}{4}$ pint pail holds 1 pound, and the 1 pint pail holds $1\frac{1}{2}$ pounds. There is no daubing, no waste, and no dipping honey

out of a can, for the store-keeper, but it is all clean work, and the glass buckets make a nice appearance. I always have them placed in a showcase, or where they may be easily seen. The pails have bails, and are handy to carry. I also put up honey in pint fruit-jars, but I sell five dozen glass buckets where I sell one dozen of the fruit-jars. I sold more than my entire crop of extracted honey last year in this way. My crop for 1886 was 4,000 pounds of extracted and 2,000 pounds of comb honey, from 118 colonies. Last fall I was in Detroit, and I did not find one store that had extracted honey put up in glass pails. O, how I wished that East Saginaw was as large as Detroit! It is a little hard at first to work up a trade, but if I found a store-keeper that I could not sell to, I would let him take one dozen of each kind of pails and tell him that when the honey was sold I would call for the money for them; and in this way I worked up a nice home market. In order to hold the market, I would always exchange other honey for that which was candied; for if it stands any length of time it will get hard and not sell well. Do the fair thing with your customers, and you can always sell your honey.

Bee-Cellar Lined Overhead.—Frank A. Eaton, Bluffton, O., on Jan. 26, 1887, writes:

I notice in the answers to Query, No. 365, that it is generally conceded that the lining overhead in a bee-cellar is not necessary. My experience is different. I consider it very necessary, not only to prevent noise, but to help regulate an even temperature. Lath the joist overhead with common plastering-lath, and pack it as it is lathed with good oat-straw; this will absorb the moisture of the cellar and help to regulate the temperature. I have wintered over 100 colonies without any loss (except from starvation), in this sort of cellar for the past four winters.

Bees Playing in Mid-Winter.—Jonas Scholl, (70-72), Lyon's Station, Ind., on Jan. 29, 1887, writes:

Bees have come through the long cold "snap" in fine condition. After six weeks of confinement to the hives they had a good flight on Jan. 23. It is quite a satisfaction to see the bees play in the sunshine in mid-winter. In the last ten years I have made no material change in the manner of wintering bees, because it has been so satisfactory. This winter one-third of the colonies have "Hill's device" over the frames instead of square sticks. This gives the bees room to cluster more compactly under the blanket, and easy access to their stores. For convenience and utility, but few inventions have been given to the bee-keeping public that excel this simple arrangement.

The Pan-Handle Bee-Keepers' Association will meet at Wheeling, W. Va., in the K. of P. Hall, 1138 Main St., on Mar. 3 and 4, 1887.
W. L. KINNEY, Sec.



Issued every Wednesday by
THOMAS G. NEWMAN & SON,
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 923 & 925 WEST MADISON ST., CHICAGO, ILL.
 At One Dollar a Year.

ALFRED H. NEWMAN,
 BUSINESS MANAGER.

Special Notices.

To Correspondents.—It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

Money Orders can now be obtained at the Post Offices at reduced rates. Five dollars and under costs now only 5 cents. As these are absolutely safe, it will pay to get them instead of the Postal Notes which are payable to any one who presents them, and are in no way safe.

Preserve your Papers for reference. If you have no **BINDER** we will mail you one for 60 cents, or you can have one **FREE** if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

Colored Posters for putting up over honey exhibits at Fairs are quite attractive, as well as useful. We have prepared some for the BEE JOURNAL, and will send two or more free of cost to any one who will use them, and try to get up a club.

We will Present Webster's Dictionary (pocket edition), and send it by mail, postpaid, for two subscribers with \$2. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

One Dollar invested for the weekly visits of the AMERICAN BEE JOURNAL for 1887, will richly repay every apiarist in America.

Continuous Advertising brings much larger returns, in proportion to the outlay, than periodic or spasmodic advertising. Keep this point before the people.

OUR CLUBBING LIST.

We supply the **American Bee Journal** one year, and any of the following publications, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage prepaid.

	Price of both.	Club
The American Bee Journal	1 00..	
and Gleanings in Bee-Culture.....	2 00..	1 75
Bee-Keepers' Magazine.....	1 25..	1 25
Bee-Keepers' Guide.....	1 50..	1 40
The Apiculturist.....	2 00..	1 70
Canadian Bee Journal.....	2 00..	1 75
Rays of Light.....	1 50..	1 35
The 7 above-named papers	5 25..	4 50
and Cook's Manual.....	2 25..	2 00
Bees and Honey (Newman).....	2 00..	1 75
Binder for Am. Bee Journal.....	1 60..	1 50
Dzierzon's Bee-Book (cloth).....	3 00..	2 00
Root's A B C of Bee-Culture.....	2 25..	2 10
Farmer's Account Book.....	4 00..	2 00
Guide and Hand-Book.....	1 50..	1 30
Heddon's book, "Success,".....	1 50..	1 40
A Year Among the Bees.....	1 75..	1 50

One yearly subscription for the AMERICAN BEE JOURNAL must be ordered with each paper or book, in order to take advantage of the prices named in the last column.

System and Success.

☞ All who intend to be systematic in their work in the apiary, should get a copy of the **Apiary Register** and commence to use it. the prices are reduced, as follows:

For 50 colonies (120 pages).....	\$1 00
" 100 colonies (220 pages).....	1 25
" 200 colonies (420 pages).....	1 50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable.

More Premiums.—Mr. L. J. Diehl, of Butler, Ind., offers a colony of Italian bees as a present to the person sending to this office the largest club of subscribers for 1887. The subscriptions may be sent in at any time before the first of May at our regular club rates, and additions made as desired, but it must be stated that you are working for that premium, so that we can keep account of the subscriptions.

Red Labels for one-pound pails of honey, size 3x4½ inches.—We have just gotten up a lot of these Labels, and can supply them at the following prices: 100 for \$1.00; 250 for \$1.50; 500 for \$2.00; 1,000 for \$3.00; all with name and address of apiarist printed on them—by mail, postpaid.

By Using the Binder made expressly for this BEE JOURNAL, all can have them bound and ready for examination every day in the year. We have reduced the price to 60 cents, postpaid. Subscription for one year and the binder for \$1.50.

☞ **Sample Copies** of the BEE JOURNAL will be sent **FREE** upon application. Anyone intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office, or we will send them all to the agent.

Home Market for Honey.

☞ To create Honey Markets in every village, town and city, wide-awake honey producers should get the Leaflets "Why Eat Honey" (only 50 cents per 100), or else the pamphlets on "Honey as Food and Medicine," and scatter them plentifully, and the result will be a DEMAND for all of their crops at remunerative prices. "Honey as Food and Medicine" are sold at the following prices:

Single copy, 5 cts.; per doz., 40 cts.; per hundred, \$2.50. Five hundred will be sent postpaid for \$10.00; or 1,000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc. (giving the name and address of the bee-keeper who scatters them).

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell lots of it.

Yucca Brushes are employed for removing bees from the combs. They are a soft, vegetable fiber, and do not irritate the bees. As each separate fiber extends the whole length of the handle as well as the brush, they are almost indestructible. When they become sticky with honey, they can be washed, and when dry, are as good as ever. The low price at which they are sold, enables any bee-keeper to have six or more of them, so as to always have one handy. We can supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

When Renewing your subscription please try to get your neighbor who keeps bees to join with you in taking the BEE JOURNAL. It is now so cheap that no one can afford to do without it. We will present a **Binder** for the BEE JOURNAL to any one sending us three subscriptions—with \$3.00—direct to this office. It will pay any one to devote a few hours, to get subscribers.

Dr. Miller's Book, "A Year Among the Bees," and the BEE JOURNAL for one year, we will club for \$1.50.

The Western World Guide and Hand-Book of Useful Information, contains the greatest amount of useful information ever put together in such a cheap form. The printing, paper, and binding are excellent, and the book is well worth a dollar. To any one sending us two new subscribers besides his own, with \$3.00, for one year, we will present a copy of this valuable book.

Do you Want a Farm Account Book? We have a few left, and make you a very tempting offer. It contains 166 pages, is printed on writing paper, ruled and bound, and the price is \$3. We will club it and the Weekly BEE JOURNAL for a year and give you both for \$2. If you want it sent by mail, add 20 cents for postage.

The Convention History of America with a full report of the proceedings of the Detroit and Indianapolis conventions, and the AMERICAN BEE JOURNAL for one year, will be clubbed for \$1.25.

Honey and Beeswax Market.

The following are our very latest quotations for honey and beeswax:

CHICAGO.

HONEY.—Sellers ask from 7 to 10 cts. for anything off in comb honey; this includes dark undesirable and crooked combs, and 2-pound sections. Good 1-lb. sections, 10@12c.; choice, 12@13c. No demand for extracted, and very little for comb. **BEESWAX.**—23c. **R. A. BURNETT.** Jan. 19. 161 South Water St.

NEW YORK.

HONEY.—We quote: Fancy white in 1-lb. sections, 10@12c.; in 2-lbs. 9@10c.; off grades, 1 to 2 cts. per lb. less. Buckwheat, in 1-lb. sections, 8@9c.; in 2-lbs. 7@7½c. Extracted, California, 5@6c.; buckwheat, 4@4½c. Supply of comb honey is large, and demand for all kinds is improving. **BEESWAX.**—21@23c.

MCCAUL & HILDRETH BROS.,

Jan. 21. 34 Hudson St.

SAN FRANCISCO.

HONEY.—Extracted is firm at 4@4½c., and comb at 7@12c. per lb. **BEESWAX.**—19@21c.

Jan. 31. **SCHACHT & LEMCKE,** 122-124 Davis St.

BOSTON.

HONEY.—1-lb. packages of white clover honey at 13@14c.; 2-pounds at 11@12c. Extracted, 5@7c. **BEESWAX.**—24 cts. per lb.

Jan. 21. **BLAKE & RIPLEY,** 57 Chatham Street.

DETROIT.

HONEY.—Few sales are reported. Best white comb, 12½c.; Fall comb honey, 10@11c. Extracted is offered for 6@8c. **BEESWAX.**—Firm at 23c.

Jan. 22. **M. H. HUNT,** Bell Branch, Mich.

CINCINNATI.

HONEY.—We quote for extracted, 4@7c. per lb. Nice comb brings 12@15c. per lb. in a jobbing way. **BEESWAX.**—Good demand, 20@22c. per lb. for good to choice yellow.

Jan. 22. **C. F. MUTH & SON,** Freeman & Central Av.

CLEVELAND.

HONEY.—Choice white, in 1-lb. sections, sells at 12c.; second quality white, 12c.; dark 1-lb., 10c.; white 2-lbs., 11@12c. Extracted, 6c. Market dull. **BEESWAX.**—25c.

Jan. 14. **A. C. KENDEL,** 115 Ontario Street.

MILWAUKEE.

HONEY.—We quote choice 1-lb. sections at 12@12½c.; 2-lbs., 11@12c. No call for dark. White extracted, in barrels and kegs, 6@6½c.; in small packages, 7@8c.; dark, in barrels and kegs, 5@5½c. **BEESWAX.**—25c.

Jan. 19. **A. V. BISHOP,** 142 W. Water St.

SAN FRANCISCO.

HONEY.—We quote: Comb, extra white, 12@13 cts.; amber to white, 8@11. Extracted, white, 4@4½c.; amber and candied, 3@4c. Trade is quiet.

Jan. 10. **O. B. SMITH & CO.,** 453 Front St.

KANSAS CITY.

HONEY.—We quote white clover 1-pounds at 12c.; dark 1-lb., 8@10c.; white clover 2-lbs., 10@11 cts.; dark 2-lbs., 7@9c. Extracted, white clover, 9c.; dark, 4@5c.; white sage, 5@5½c.; amber, 4@5c. **BEESWAX.**—20@23c.

Jan. 13. **CLEMONS, CLOON & CO.,** cor. 4th & Walnut.

ST. LOUIS.

HONEY.—Choice comb, 10@12c.; latter price is for choice white clover. Strained, in barrels, 4@4½c. Extra fancy of bright color and in No. 1 packages, ¼ advance on above prices. Extracted in barrels, 4½@5c.; in cans, 5@6c. Market dull. **BEESWAX.**—Firm at 21c. for prime.

Feb. 3. **D. G. TUTT & CO.,** Commercial St.

E. Duncan Sniffen, Advertising Agent, 3 Park Row, New York, inserts advertisements in all first-class Newspapers and Magazines with more promptness and at lower prices than can be obtained elsewhere. He gives special attention to writing and setting up advertisements in the most attractive manner, and guarantees entire satisfaction. In all his dealings, he is honorable and prompt. Send for his Catalogue of first-class advertising mediums. Mailed free. 52A40t

Advertisements.

PURE Italians. Tested Queens, June, 1.25 each. \$12 doz. Full colony & tested queen, June, \$6. 50 doz. **O. N. BALDWIN,** Clarksville, Mo.

READY TO SHIP.—Langstroth Brood-R Frames, prepared to nail, at 90 cents per 100; 500 for \$4.00. I have several thousand of those Nice Brood-Frames in the flat, which, if ordered before Apr. 1, may be had for \$8 per 1,000, freight prepaid by C. W. DAYTON, Bradford, Iowa. 2E1t

FOR SALE.—100 Full Colonies of Italian and Hybrid BEES, in 2-story Standard Langstroth Hives, at \$10 per Colony. Four-fifths of the Combs are drawn out from Foundation in wired frames; all Queens reared under the swarming impulse, except a few superseded in full colonies. With the largest order (not less than 10) I will give an Excelsior Honey-Extractor; with 2nd largest (not less than 5), an Excel. Wax-Extractor and Uncapping-Knife—provided I sell my Bees. Bees shipped as ordered, and in the order they are in bee-yard. Remit by P. O. Money Order, or Draft on New Orleans. Correspondence & offers solicited. Address, **W. T. MADDOX,** Alexandria, La. 6A1t

DON'T GET LEFT!—Nothing extends reputation equal to the brilliant Chromo Bee-Card. See page 77, or address, **J. H. MARTIN,** HARTFORD, N. Y. 6W(3tm)40t

WANTED.—To confer with a reliable married man who has a good knowledge of Bees, with a view of establishing an Apiary near Boston. Address, **BOX 151, MILTON, MASS.** 6A2t

WANTED. an active, reliable man in every city and town in the State of Illinois to work up Councils of the American Legion of Honor, an insurance organization now having 60,000 members, and we are willing to pay liberally in cash for services rendered in this work. It can be performed at odd and leisure hours without interference with regular business, and is an occupation affording much pleasure to those engaged in it. For full explanation how to go to work and what to do, address

THOMAS G. NEWMAN,

925 West Madison St., CHICAGO, ILLS.

WANTED.—I cannot give my bees the attention they should have, and I am therefore anxious to obtain the services of a competent, reliable apiarist, to aid me. I want a single man. For further particulars address, **E. C. JORDAN,** 6A1t JORDAN SPRINGS, Fred Co., VA.

CLOVER SEEDS.

We are now selling Alsike Clover Seed at the following prices: \$8.00 per bushel, \$2.25 per peck, and 25 cents per pound. Also, Melilot or Sweet Clover Seed: \$6.00 per bushel, \$1.75 per peck, and 20 cents per pound, by express or freight. All orders promptly filled upon arrival.

THOS. G. NEWMAN & SON,

923 & 925 West Madison Street, CHICAGO, ILL.

OLD TIME PRICES!

UNTIL further notice I will accept orders for **FOUNDATION** as follows—to be shipped in April:
Dunham Brood, per lb. 35c.
Vandervort Thin, per lb. 45c.
All fresh made. Also the best **FOUNDATION FASTENER** in the market.
WAX worked—Dunham 8 cts. and Vandervort 15 cts. per lb. No Circulars. Seven years experience in the business. **J. V. CALDWELL,** 6A1t CAMBRIDGE, Henry Co., ILLS.

Chapman Honey-Plant Seed

(*Echinops spherocephalus*.)

We can supply this seed **POST-PAID** at the following prices: One-half ounce, 50 cents; 1 ounce, \$1; 2 ounces, \$1.50; 4 ounces, \$2; ½ pound, \$3; 1 pound, \$5. One pound of seed is sufficient for half an acre, if properly thinned out and re-set.

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APIARY FOR SALE

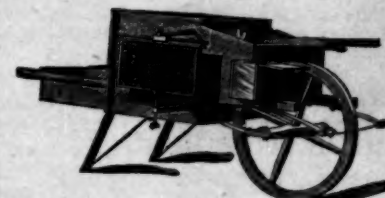
HAVING other interests which claim my attention, I wish to sell my apiary of 138 Colonies, in the village of **Winnebago, Ills.**—7 miles from Rockford, and 100 miles west of Chicago. The location is first-rate, and no other apiary near. The past season, 82 colonies increased to 138, and gave 7,000 lbs. surplus—nearly all white clover, and 4-5 of it comb; 2,300 lbs. sold at home for cash without peddling. Langstroth Hives, with good Combs, Tiering-up Section-Cases, Division-Boards and Feeders, Extractor, and good Honey-House. (Rented place of one acre.)

If not disposed of before April, it will be sold at auction.

C. M. HOLLINGSWORTH,

6E3t WINNEBAGO, ILLS.

Systematic & Convenient



DAVIS' PATENT HONEY CARRIAGE,
REVOLVING COMB-HANGER,
Tool Box and Recording Desk Combined.

Price, complete, only \$18.00

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DRAKE & SMITH,

Successors to A. E. Manum, Bristol, Vt.

MANUFACTURERS of the **BRISTOL** Bee-Hive, the Standard Hive of Vermont.

SECTION HONEY BOXES,

made from white poplar, (the best timber in the world for honey-boxes), Clamps, and a Wood Thumb-Screw for Clamps. Separators and Wood Sides. **LIGHTNING GLUERS,** Shipping-Crates, Bee-Escapes, Bee-Feeders, and

MANUM'S BEE-SMOKERS,

all made of the best material and in a workman-like manner. Send stamp for Sample SECTION and Price-List. 2E12t

NEW ONE-POUND HONEY PAIL.



THIS new size of our Tapering Honey Pails is of uniform design with the other sizes, having the top edge turned over, and has a ball or handle,—making it very convenient to carry. It is well-made and, when filled with honey, makes a novel and attractive small package, that can be sold for 20 cents or less. Many consumers will buy it in order to give the children a handsome toy pail. **PRICE, 75 cents per dozen, or \$5.00 per 100.**

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Bee-Keepers' Supplies

of all kinds kept in stock, at low rates.

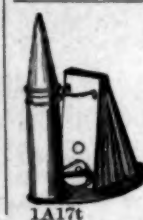
THE QUINBY SMOKER

a specialty.

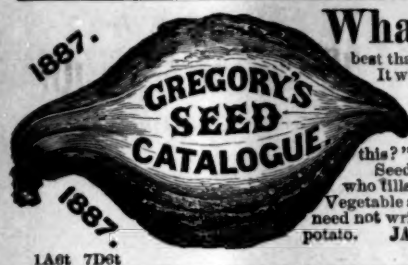
Send for Illustrated Price-List.

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Successor to L. C. Root, Oriskany, Onondaga Co., N. Y.



1A17t



What Mr. Beyer says: "Please

best thanks for the splendid seeds received from your firm. It would be a rather lengthy list if I should name all, but will say that amongst 33 first, and 3 second premiums awarded me at our fairs in Northern Indiana and Southern Michigan, 23 first premiums were for vegetables raised from your seeds. What firm can beat this?"

Seed of this quality I am now ready to sell to every one who fills a farm or plants a garden, sending them FREE my Vegetable and Flower Seed Catalogue, for 1887. Old customers need not write for it. I catalogue this season the native wild potato. JAS. J. H. GREGORY, Seed Grower, Marblehead, Mass.

1A6t 7D6t

A Year among the Bees,

BEING

A Talk about some of the Implements, Plans and Practices of a Bee-keeper of 25 years' Experience, who has for 8 years made the Production of Honey his Exclusive Business.

BY DR. C. C. MILLER.

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THE BRITISH BEE JOURNAL AND BEE-KEEPER'S ADVISER.

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By B. J. KENDALL, M. D.

A TREATISE giving an index of diseases, and the symptoms; cause and treatment of each, a table giving all the principal drugs used for the horse, with the ordinary dose, effects and antidote when a poison; a table with an engraving of the horse's teeth at different ages, with rules for telling the age of the horse; a valuable collection of recipes, and much valuable information.

Price 25 cents—in English or German.

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Send 75 Cents for my New Book—"A Year among the Bees," 114 pages, cloth bound. Address,
DR. C. C. MILLER,
20Atf MARENGO, ILLS.

NON-SWARMING BEE-HIVES.
Most practical for surplus honey in the World. Excellent for rearing Queens; also for Increase, when desired. Send 2 cents for Circulars.
VICTOR W. CLOUGH, GENESEO, ILLS.
51A12t

JONES' FRAME-PLYERS.



FOR taking frames out of hives, or moving them in any way desired. It is made of Japanned Iron, and can be utilized in many ways. It has a long claw for loosening frames, and a hook which may be used for carrying other frames besides the one held by the Pliers. Price, 40 cts., by mail.

THOS. G. NEWMAN & SON,
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PRIZES!

ARE offered by the Magazine, to the Subscribers who obtain the largest amount of Comb Honey during 1887. Write for particulars. **THE BEE-KEEPERS' MAGAZINE**, 25 cents per Year.

1Atf

BARRYTOWN, N. Y.

(Mention this JOURNAL.)

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

Muth's Honey Extractor,
Perfection Cold-Blast Smokers,
SQUARE GLASS HONEY-JARS, etc.

For Circulars apply to

CHAS. F. MUTH & SON,
Freeman & Central Ave., CINCINNATI, O.
P.S.—Send 10c. for Practical Hints to Bee-Keepers

EXCELSIOR HONEY EXTRACTORS



In answer to frequent inquiries for Extractors carrying 3 and 4 Langstroth frames, we have concluded to adopt these two new sizes. The 3 frame basket is in a can of the same size and style as the 2 frame. The 4 frame basket is in the larger can, with the cone or metal standard for the basket to revolve upon, leaving room underneath the basket for 75 or 80 lbs. of honey. It will be complete, with covers, and in every way identical, except in size, with the \$18.00 Extractor, 13x20, which is intended for any size of frame.

Excepting with the \$8.00 Extractors, all the different styles have strainers over the canal leading to the honey gate, and movable sides in the Comb Baskets. The \$8.00 and \$10.00 Extractors have no covers.

For 2 American frames, 13x13 inches.....	\$8 00
For 2 Langstroth " 10x18 "	8 00
For 3 " " 10x18 "	10 00
For 4 " " 10x18 "	14 00
For 2 frames of any size, 13x20	12 00
For 3 " " 13x20 "	12 00
For 4 " " 13x20 "	16 00

THOS. G. NEWMAN & SON,
923 & 925 West Madison Street, CHICAGO, ILL.

Vandervort Foundation Mill.

6 Inch, Price, \$20.00.

It makes the finest extra thin Foundation for comb honey. For Sale by

THOS. G. NEWMAN & SON,
923 & 925 West Madison Street, CHICAGO, ILL.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

The NEW Heddon Hive.

We have made arrangements with the inventor by which we shall make and sell the Heddon Reversible Hive, both at wholesale and retail; nailed and also in the flat.

It is absolutely essential to order our nailed hive as a pattern for putting them in the flat together correctly.

Hives, nailed and painted, \$4.00 each.

HIVES READY TO NAIL.—In filling orders for these hives, in the flat, we make 6 different combinations, so that our customers may make a selection from the sample nailed hive, without waiting for us to quote prices, and the different kinds will be known by the following numbers:

No. 1 consists of the stand, bottom-board, cover, two 6-inch brood-chambers, 16 frames, and the slatted honey-board. Price, \$1.55 each.

No. 2 is the same as No. 1, with the addition of one surplus story containing 28 sections without separators—interchangeable, but not reversible. Price, \$2.00 each.

No. 3 is the same as No. 2, with two surplus stories as therein described. Price, \$2.50 each.

No. 4 is the same as No. 1, with the addition of one surplus story containing 28 sections in wire frames with separators, which can be reversed, inverted, and interchanged, the same as the brood-chambers. Price, \$2.50 each.

No. 5 is the same as No. 4, with two surplus arrangements as therein described. Price, \$3.00 each.

No. 6 contains all the parts as described in the sample nailed hive. Price, \$3.75 each.

Those desiring the hives without the stand, honey-board or sections, may make the following deductions from the above prices: Stand, 14 cents; honey-board, 8 cents; and the 28 or 56 sections, as the case may be, at 1/2 cent each, respectively.

We will also make the following deductions on quantities ordered all at one time: For 10 or more hives, 5 per cent. discount; for 25 or more hives, 7 1/2 per cent.; for 50 or more, 10 per cent.

THOMAS G. NEWMAN & SON,
923 & 925 West Madison-St., CHICAGO, ILL.

JESSIE.

We are the introducers of the Jessie Strawberry, and the only firm that can supply plants to the trade. It is the most remarkable new fruit of the age. Send for particulars and colored plate; also for copy of Green's Fruit Grower, and our illustrated Fruit Catalogue.

TREE SALESMEN WANTED.

You can make money selling our trees, and get your own trees free. Green's Guide to Grape Culture, 25c. Green's Guide to Strawberry Culture, 25 cents. Green's Fruit Grower, 50c. per year, and Green's "How to Propagate and Grow Fruit," 50c., all to one address for 50c. Green's Tree Agent's Guide, 15c. Green's Books, (3) combined with 15 colored plates, gilt cover, 75 cents. Green's Descriptive Catalogue, with 5 colored plates and two back copies of Fruit Grower, 10c. Address,

GREEN'S NURSERY CO.,
4A5t ROCHESTER, N. Y.

BEESWAX.

We pay 30c. per lb., delivered here, for yellow Beeswax. To avoid mistakes, the shipper's name should always be on each package.

THOS. G. NEWMAN & SON,
923 & 925 West Madison Street, CHICAGO, ILL.

VICK'S FLORAL GUIDE.

If you are in want of Garden, send 10 cts. or anything for the can be deducted from for above, which the first order. **JAMES VICK, SEEDS SEEDSMAN,** ROCHESTER, N. Y.